

IN THE SPECIFICATION:

Replace the title of the application as follows:

-- ANGLE DETECTION OPTICAL SYSTEM, ANGLE DETECTION APPARATUS, OPTICAL SIGNAL SWITCH SYSTEM AND INFORMATION RECORDING AND REPRODUCTION SYSTEM --

Page 1, replace second paragraph with:

The present invention relates an angle detection optical system to an angle detection apparatus, an optical signal switch system, and an information recording and reproduction system.

Page 3, last paragraph replace with:

In accordance with a first aspect of the present invention, an angle detection optical system comprises: a light source that irradiates light onto a reflective surface for detection provided on a detection object; an optical path splitting element that splits reflected light that has been reflected by the reflective surface for detection into first and second luminous fluxes that are respectively propagated on at least first and second optical paths that are different from each other; a first optical detector that is placed on the first optical path so as to receive the first luminous flux; and a second optical detector that is distanced from the first optical detector and placed on the second optical path so as to receive the second luminous flux.

Pages 4-11, to line 6, replace with the following:

In accordance with a second aspect of the present invention, an angle detection apparatus comprises: a light source that irradiates light onto a reflective surface for detection provided on a detection object; an optical path splitting element that splits reflected light that has been reflected by the reflective surface for detection into first and second luminous fluxes that are respectively propagated on at least first and second optical paths that are different from each other; a first optical detector that is placed on the first optical path so as to receive the first luminous flux; a second optical detector that is distanced from the first optical detector and placed on the second optical path so as to receive the second luminous flux; and a signal processor that receives a first detection signal from the first optical detector and a second

detection signal from the second optical detector and processes the first and second detection signals so as to generate an angle detection signal that corresponds to a magnitude of an inclination angle of the detection object.

In accordance with a third aspect of the present invention, an optical signal switch system comprises: at least one light deflection element that is provided on a detection object and switches optical paths of optical signals; a reflective surface that is provided on the detection object; a light source that irradiates light onto the reflective surface; an optical path splitting element that splits reflected light that has been reflected by the reflective surface into first and second luminous fluxes that are respectively propagated on at least first and second optical paths that are different from each other; a first optical detector that is placed on the first optical path so as to receive the first luminous flux; a second optical detector that is distanced from the first optical detector and placed on the second optical path so as to receive the second luminous flux; a signal processor that receives a first detection signal from the first optical detector and a second detection signal from the second optical detector and processes the first and second detection signals so as to generate an angle detection signal that corresponds to a magnitude of an inclination angle of the detection object; and a deflection angle control unit that controls a deflection angle of the light deflection element based on the angle detection signal supplied by the signal processor.

In accordance with a fourth aspect of the present invention, an information recording and reproduction system performs at least one of recording and reproduction of information signals. The information recording and reproduction system comprises: a light source that emits a first luminous flux; an optical system that forms an image of the first luminous flux on a recording surface of a recording medium; a light deflection element that is placed in the optical system, the light deflection element having a reflective surface that varies in an inclination angle depending upon a deflection angle of the first luminous flux that has been deflected in a plane that is parallel to the recording surface; a light source that irradiates light onto the reflective surface; an optical path splitting element that splits reflected light that has been reflected by the reflective surface into first and second luminous fluxes that are respectively propagated on at least first and second optical paths that are different from each other; a first optical detector that

Appl. No. 10/743,725
Amdt. dated February 27, 2006
Reply to Office Action of November 30, 2005

is placed on the first optical path so as to receive the first luminous flux; a second optical detector that is distanced from the first optical detector and placed on the second optical path so as to receive the second luminous flux; and a signal processor that receives a first detection signal from the first optical detector and a second detection signal from the second optical detector and processes the first and second detection signals so as to generate an angle detection signal that corresponds to a magnitude of an inclination angle of the detection object. -----